

- 1 ENERGY AND ENVIRONMENT CABINET
- 2 Department for Environmental Protection
- 3 Division for Air Quality
- 4 (Amendment)
- 5 401 KAR 51:052. Review of new sources in or impacting upon nonattainment areas.
- 6 RELATES TO: KRS 224.20-100(5), 224.20-110, 224.20-120, 40 C.F.R. Part 51,
- 7 Subpart I, 51.165, 51.166[(g)], 52.21, [52.21(r),] 60, 61, 81, Subpart D, 81.318, 42
- 8 U.S.C. <u>7401-7671q</u>, EO <u>2009-538</u> [7401-7626, 7407(d)(1)(A)(i), (ii), and (iii), 7410]
- 9 STATUTORY AUTHORITY: KRS 224.10-100(5), [40 C.F.R. 51.165.] 42 U.S.C.
- 10 7401-7671q, EO 2009-538 [7401-7671q (Clean Air Act)]
- 11 NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 authorizes
- 12 [requires] the cabinet [Environmental and Public Protection Cabinet] to promulgate
- 13 administrative regulations for the prevention, abatement and control of air pollution. EO
- 14 2009-538, effective June 12, 2009, establishes the Energy and Environment Cabinet.
- 15 This administrative regulation establishes requirements for the construction or
- 16 modification of stationary sources within, or impacting upon, areas where the national
- 17 ambient air quality standards have not been attained. The provisions of this
- 18 administrative regulation are neither different nor more stringent than the federal
- 19 regulation 40 C.F.R. 51.165.
- Section 1. Applicability. This administrative regulation shall apply to the
- 21 construction of a new major stationary source or a [any] project that is a major

- 1 modification at an existing major stationary source, which commences construction after 2 September 22, 1982, and locates in or impacts upon an area designated nonattainment
- 3 under 42 U.S.C. 7407(d)(1)(A)(i).

- (1) The provisions of this administrative regulation relating to visibility protection shall also apply to major sources or major modifications in nonattainment areas that potentially have an impact on visibility in a mandatory Class I federal area.
- (2) Applicability tests for projects. Except as provided in <u>subsection (3)</u> [subsections (3) or (4)] of this section, a project shall be a major modification for a regulated NSR pollutant only if the project causes a significant emissions increase and a significant net emissions increase, as provided in paragraphs (a) and (b) of this subsection.
- (a) Prior to beginning actual construction, the owner or operator shall first determine if a significant emissions increase will occur for the applicable type of unit being constructed or modified according to subparagraphs 1 to 3 [4] of this paragraph.
- 1. Actual-to-projected actual applicability test for projects that only involve existing emissions units. A significant emissions increase of a regulated NSR pollutant shall be projected to occur if the sum of the difference between the projected actual emissions and the baseline actual emissions for each existing emissions unit equals or exceeds the significant amount for that pollutant.
- 2. Actual-to-potential test for projects that involve only construction of new emissions units. A significant emissions increase of a regulated NSR pollutant shall be projected to occur if the sum of the potential to emit from each new emissions unit following completion of the project equals or exceeds the significant amount for that

- 1 pollutant.
- 3. [Emissions test for projects that involve clean units. For a project that will be
- 3 constructed and operated at a clean unit as provided in Sections 11 and 12 of this
- 4 administrative regulation, without causing the unit to lose its clean unit designation, an
- 5 emissions increase shall not be deemed to occur.
- 6 ——4.] Hybrid test for projects that involve multiple types of emissions units. A
- 7 significant emissions increase of a regulated NSR pollutant shall be projected to occur if
- 8 the sum of the emissions increases for each emissions unit, using the methods
- 9 specified in subparagraphs 1 and 2 [to 3] of this paragraph as applicable for each
- 10 emissions unit, equals or exceeds the significant amount for that pollutant.
- 11 (b) Prior to beginning actual construction and after completing the applicable test
- 12 in paragraph (a) of this subsection, the owner or operator shall determine for each
- 13 regulated NSR pollutant if a significant net emissions increase will occur pursuant to
- 14 401 KAR 51:001, Section 1(144) and (218). [1, (146).]
- 15 (3) For a plant-wide applicability limit (PAL) for a regulated NSR pollutant at a
- 16 major stationary source, the owner or operator of the major stationary source shall
- 17 comply with the applicable requirements of Section 11 [14] of this administrative
- 18 regulation.
- 19 [(4) An owner or operator undertaking a pollution control project (PCP) shall
- 20 comply with Section 13 of this administrative regulation.]
- 21 Section 2. Initial Screening Analyses and Determination of Applicable
- 22 Requirements. (1) Review of all sources for emissions limitation compliance.
- 23 (a) The cabinet shall examine each proposed major new source and proposed

- 1 major modification to determine if the source or modification will meet all applicable
- 2 emissions requirements in the Kentucky State Implementation Plan (SIP) and 40 C.F.R.
- 3 Parts 60 and 61.

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- (b) If the cabinet determines from the application and all other available information that the proposed source or modification will not meet the applicable emissions requirements, the permit to construct shall be denied.
 - (2) Review of specified sources of air quality impact.
 - (a) The cabinet shall determine if a proposed major stationary source or major modification will be constructed in an area designated as nonattainment pursuant to 42 U.S.C. 7407(d)(1)(A)(i) for a pollutant for which the stationary source or modification is major.
 - (b) If a designated nonattainment area is projected to be an attainment area as part of an approved control strategy by the new source start-up date, offsets shall not be required if the new source will not cause a new violation.
 - (3) Fugitive emissions sources. Sections 4 and 10 of this administrative regulation shall not apply to a source or modification that will be a major stationary source or major modification only if fugitive emissions, to the extent quantifiable, are considered in calculating the potential to emit of the stationary source or modification and the source does not belong to one (1) of the following categories:
 - (a) Coal cleaning plants with thermal dryers;
- 21 (b) Kraft pulp mills;
- 22 (c) Portland cement plants;
- 23 (d) Primary zinc smelters;

1	(e) Iron and steel mills;
2	(f) Primary aluminum ore reduction plants;
3	(g) Primary copper smelters;
4	(h) Municipal incinerators capable of charging more than 250 tons of refuse per
5	day;
6	(i) Hydrofluoric, sulfuric, or nitric acid plants;
7	(j) Petroleum refineries;
8	(k) Lime plants;
9	(I) Phosphate rock processing plants;
10	(m) Coke oven batteries;
11	(n) Sulfur recovery plants;
12	(o) Carbon black plants, furnace process;
13	(p) Primary lead smelters;
14	(q) Fuel conversion plants;
15	(r) Sintering plants;
16	(s) Secondary metal production plants;
17	(t) Chemical process plants, except ethanol production facilities producing
18	ethanol by natural fermentation under the North American Industry Classification
19	System (NAICS) codes 325193 or 312140; [plants;]
20	(u) Fossil-fuel boilers, or combination of fossil-fuel boilers, totaling more than 250
21	million BTUs per hour heat input;
22	(v) Petroleum storage and transfer units with a total storage capacity exceeding
23	300,000 barrels:

- (w) Taconite ore processing plants;
- 2 (x) Glass fiber processing plants;
- 3 (y) Charcoal production plants;
- 4 (z) Fossil fuel-fired steam electric plants of more than 250 million BTUs per hour 5 heat input; or
- 6 (aa) Another stationary source category which, as of August 7, 1980, is being 7 regulated under 42 U.S.C. 7411 or 7412.
- Section 3. Sources Locating in Designated Attainment or Unclassifiable Areas that Will Cause or Contribute to a Violation of a National Ambient Air Quality Standard.

 (1) This section shall apply only to new major stationary sources or new major modifications that will locate in designated attainment or unclassifiable areas, pursuant to 42 U.S.C. 7407(d)(1)(A)(ii) or (iii), if the source or modification will cause impacts that exceed the significance levels, as listed in the table in this subsection, at a locality that

14 does not or will not meet the national ambient air quality standards.

Pollutant	Annual		Averaging Time			
	Avera	age	24-	8-	3-	1-
	_		Hour	Hour	Hour	Hour
Sulfur	1.0	ug	5 ug		25	
Dioxide	/m ³		/m³		ug	
					/m³	
PM ₁₀	1.0	ug	5 ug		-	
	/m³		5 ug /m³			
Nitrogen	1.0	ug			-	
Dioxide	/m³					
Carbon				0.5		2
Monoxide				mg/m ³		mg/m³

(2) Sources to which this section applies shall meet the requirements in Section 4(1), (2) and (4) of this administrative regulation and may be exempt from Section 4(3) of this administrative regulation.

- (3) For sources of sulfur dioxide (SO₂), particulate matter, and carbon monoxide (CO), the determination that a new major source or major modification will cause or contribute to a violation of a national ambient air quality standard shall be made on a case-by-case basis using the source's allowable emissions in an approved atmospheric simulation model listed in 40 C.F.R. Part 51, Appendix [appendix] W, "Guideline on Air Quality Models".
- (4) For sources of NOx, the initial determination that a new major source or major modification will cause or contribute to a violation of the national ambient air quality standard for nitrogen dioxide (NO₂) shall be made using an approved atmospheric simulation model assuming all the nitric oxide emitted is oxidized to NO₂ by the time the plume reaches ground level. The initial concentration estimates may be adjusted if adequate data are available to account for the expected oxidation rate.
- (5) For ozone, sources of VOCs or NOx locating outside a designated ozone nonattainment area shall be presumed to not have a [have no] significant impact on the designated nonattainment area. If ambient monitoring indicates that the area of source location is in fact nonattainment, the source shall be permitted <u>pursuant to</u> [under the applicable provisions of] this administrative regulation and 401 KAR 52:020 until the area is designated nonattainment pursuant to 42 U.S.C. 7407(d)(1)(A)(i).
- (6) The determination that a new major source or major modification will cause or contribute to a violation of a national ambient air quality standard shall be made as of

1 the start-up date.

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- 2 (7) Applications for major new sources and major modifications locating in
- 3 attainment or unclassifiable areas, the operation of which will cause a new violation of a
- 4 national ambient air quality standard but will not contribute to an existing violation, may
- 5 be approved only if the following conditions are met:
- 6 (a) The new source shall:
- Meet an emissions limitation;
- 8 2. Meet a design, operational, or [operational or] equipment standard; or
- 9 3. Control existing sources so that the new source will not cause a violation of a national ambient air quality standard.
 - (b) The new emissions limitations for the new and existing sources affected shall be state and federally enforceable in accordance with Section 6 of this administrative regulation.
 - Section 4. Sources Locating in a Designated Nonattainment Area. This section shall apply to a new major stationary source or major modification that will be constructed in an area designated as nonattainment pursuant to 42 U.S.C. 7407(d)(1)(A)(i) for a pollutant for which the stationary source or modification is major. Approval to construct may be granted only if the conditions of this section are met.
 - (1) The new major source or major modification shall be required to meet an emissions limitation that specifies the lowest achievable emissions rate (LAER) for the source.
- 22 (2) The applicant shall demonstrate that all existing major sources owned or operated by the applicant, or an entity controlling, controlled by, or under common

- 1 control with the applicant, in the Commonwealth of Kentucky are in compliance with all
- 2 applicable emissions limitations and standards specified in Title 401, Chapters 50 to 65,
- 3 [63,] and 40 C.F.R. Parts 60 and 61 and 42 U.S.C. 7401-7626, or are in compliance
- 4 with an expeditious state and federally enforceable compliance schedule or a court
- 5 decree establishing a compliance schedule.
- 6 (3)(a) Except for VOCs or NOx emissions, emissions from existing sources in the
- 7 affected area of the proposed new major source or modification, whether or not under
- 8 the same ownership, shall be reduced or [reduced, or] offset, so that there will be
- 9 reasonable further progress toward attainment of the applicable national ambient air
- 10 quality standard (NAAQS). Only those transactions in which the emissions being offset
- are from the same criteria pollutant category shall be accepted.
- 12 (b) The ratio of total emissions reductions of VOCs or NOx to total increased
- 13 emissions of the same air pollutant shall be at least the ratio indicated for the following
- 14 ozone nonattainment area classifications:
- 15 1. For marginal nonattainment areas, at least 1.1 to 1;
- 16 2. For moderate nonattainment areas, at least 1.15 to 1;
- 17 3. For serious nonattainment areas, at least 1.2 to 1;
- 4. For severe nonattainment areas, at least 1.3 to 1; and
- 19 5. For extreme nonattainment areas, at least 1.5 to 1.
- (4) The emissions reductions shall provide a positive net air quality benefit in the
 affected area.
- 22 (a) Atmospheric simulation modeling shall not be required for VOCs and NOx.
- 23 (b) Except as provided in Section 3(5) of this administrative regulation,

compliance with subsection (3) of this section and Section 5(3)(e) of this administrative regulation shall be adequate to meet this condition.

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- (5) The proposed major stationary source or major modification shall include in the application for a construction permit an analysis of the alternative sites, sizes, production processes, and environmental control techniques for the proposed source, which demonstrates that benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.
- Section 5. Determining Credit for Emissions Offsets. (1) The baseline for determining credit for emissions reductions or offsets shall be:
 - (a) The emissions limitations in effect when [at the time] the application to construct or modify a source is filed; or
 - (b) The actual emissions of the source from which offset credit is attained if:
 - 1. The demonstration of reasonable further progress and attainment of ambient air quality standards for the SIP was based on actual emissions; or
- 2. The SIP does not contain an emissions limitation for that source or sourcecategory.
- 18 (c) Baseline actual emissions as defined in 401 KAR 51:001, Section 1(20), shall not be used for determining the baseline for emissions offsets.
- 20 (2) Credit for emissions offsets. Credit for emissions offset may be allowed for existing control that goes beyond the control required under 401 KAR Chapters 50 to 65 [68] and applicable [existing] federal regulations.
 - (3) General provisions for calculating offset values.

- (a) Offset calculations shall be made on a pound-per-hour basis if all facilities
 involved in the emissions offset calculations are operating at their maximum or allowed
 production rate.
 - (b) Offsets may be calculated on a tons-per-year basis if baseline emissions for existing sources providing the offsets are calculated using the actual annual operating hours for the previous two (2) year period.

- (c) If the cabinet requires certain hardware controls instead of an emissions limitation, baseline allowable emissions shall be based on actual operating conditions for the previous two (2) year period in conjunction with the required hardware controls.
- (d) If the emissions limitations required by the cabinet allow greater emissions than the uncontrolled emissions rate of the source, emissions offset credit shall be allowed only for control below the uncontrolled emissions rate.
- (e) The owner or operator of a new or modified major stationary source shall comply with any offset requirement in effect under this administrative regulation to increase emissions of an air pollutant by:
- 1. Obtaining emissions reductions of the air pollutant from the same source or other sources in the same nonattainment area; or
 - 2. From sources in another nonattainment area if:
- a. The other area has an equal or higher nonattainment classification than the area in which the source is located; and
- b. Emissions from the other area contribute to a violation of the national ambient
 air quality standard in the nonattainment area in which the source is located.
 - (4) Calculating offsets if an [ne] applicable emissions limitation does not exist.

- 1 [exists.] If the Kentucky SIP does not contain an emissions limitation for a source or
- 2 source category, the emissions offset baseline involving the source shall be actual
- 3 emissions determined under actual operating conditions for the previous two (2) year
- 4 period.

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- 5 (5) Calculating offsets for existing fuel combustion sources.
 - (a) The emissions for determining emissions offset credit involving an existing fuel combustion source shall be the allowable emissions under the emissions limitation requirements of the cabinet for the type of fuel being burned when [at the time] the new major source or major modification application is filed.
 - (b) If the existing source has switched to a different type of fuel at some earlier date, a resulting emissions reduction, either actual or allowable, shall not be used for emissions offset credit.
 - (c) If the existing source commits to switch to a cleaner fuel at some future date, emissions offset credit based on the allowable emissions for the fuels involved shall not be allowed unless the permit is conditioned to require the use of a specified alternative control measure that will achieve the same degree of emissions reduction if the source switches back to a dirtier fuel at some later date.
 - (6) Calculating offsets for operating hours and source shutdowns.
- (a) A source may be credited with emissions reductions achieved by shutting down an existing source or permanently curtailing production or operating hours below baseline levels if the work force to be affected has been notified in writing of the proposed shutdown or curtailment.
 - (b) Source shutdowns and curtailments in production or operating hours

- occurring prior to the date the new source application is filed shall not be used for emissions offset credit.
- (c) If an applicant can establish that it shut down or curtailed production after

 August 7, 1977, or less than one (1) year prior to the date of permit application,

 whichever is earlier, and the proposed new source is a replacement for the shutdown or

 curtailment, credit for the [such] shutdown or curtailment may be applied to offset

 emissions from the new source.
 - (7) Calculating offsets for hydrocarbon substitution. An emissions offset credit shall be allowed for replacing one volatile organic compound with another of lesser photochemical reactivity, unless the replacement compound is methane, ethane, 1,1,1-trichloroethane or [1,1,1-trichloroethane or] trichlorofluoroethane.
 - (8) Banking of emissions offset credit.

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- (a) New sources obtaining permits by applying offsets after the effective date of this administrative regulation may bank offsets that exceed the requirements of Section 5(3) of this administrative regulation.
- (b) An owner or operator of an existing source that reduces its own emissions may bank a resulting reduction beyond those required by regulation for use under this administrative regulation, even if the offsets are applied immediately to a new source permit.
- 20 (c) Banked emissions offsets may be used under the preconstruction review 21 program required in 42 U.S.C. 7401 to 7626, as long as these banked emissions are 22 identified and accounted for in Kentucky's control strategy.
 - (9) Offset credit for meeting NSPS or NESHAPS.

- 1 (a) If a source is subject to an emissions limitation established in a New Source
- 2 Performance Standard (NSPS) or a National Emissions Standard for Hazardous Air
- 3 Pollutants (NESHAPS) and a different emissions limitation is required by the cabinet,
- 4 the more stringent limitation shall be used as the baseline for determining credit for
- 5 emissions offsets.
- (b) The difference in emissions between NSPS or NESHAPS and other
 emissions limitations <u>shall</u> [may] not be used as offset credit.
- Section 6. Administrative Procedures for Emissions Offsets. (1) Emission reductions shall be enforceable by the cabinet and the U.S. EPA, and shall be accomplished by the start-up date of the new source.
- 11 (a) If emissions reductions are to be obtained in a state that neighbors the
 12 Commonwealth for a new source to be located in the Commonwealth, the emissions
 13 reductions shall be enforceable by the neighboring state or local agencies and the U.S.
 14 EPA.
- (b) The necessary emissions offsets may be proposed by the owner of theproposed source or by the cabinet.
- 17 (2) Source initiated emissions offsets.
- 18 (a) The owner or operator of a source may propose:
- 1. Internal emissions offsets, which involve reductions from sources controlled by the owner; or
- 2. External emissions offsets, which involve reductions from other sources, if the emissions offsets meet the requirements of this section and Section 4(3) of this administrative regulation.

- (b) An internal emissions offset shall be included and made enforceable as a condition of the source's permit.
 - (c) An external emissions offset shall only be accepted if the cabinet requires the affected source to comply with a new emissions limitation to ensure that its emissions shall be reduced by a specified amount in a specified time; and the new emissions limitation shall be enforceable by the cabinet and the U.S. EPA.
- 7 (3) Cabinet initiated emissions offsets.

- (a) The cabinet may commit to reducing emissions from mobile sources and other existing sources to provide a net air quality benefit in the impact area of a proposed new source to accommodate the proposed new source.
- (b) This emissions reduction commitment shall be reflected in the emissions limitation requirements for the new and existing sources as required by this section.
- Section 7. Source Obligation. (1) An owner or operator of a source or modification subject to this administrative regulation shall construct and operate the source or modification in accordance with the application submitted to the cabinet under this administrative regulation and 401 KAR 52:020 or under the terms of an approval to construct.
- 18 (2)(a) Approval to construct shall become invalid if construction:
- 1. Is not commenced within eighteen (18) months after receipt of the approval;
- 20 2. Is discontinued for a period of eighteen (18) months or more; or
- 3. Is not completed within a reasonable time.
- (b) The cabinet may extend the eighteen (18) month period upon a satisfactory
 demonstration [showing] that an extension is justified.

- 1. An extension shall not apply to the time period between construction of the approved phases of a phased construction project; and
- 2. Each phase shall commence construction within eighteen (18) months of the
 projected and approved commencement date.

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- (3) Approval to construct shall not relieve an owner or operator of the responsibility to comply fully with applicable provisions of 401 KAR Chapters 50 to 65 [63] and [any] other applicable requirements under local, state, or federal law.
- (4) If a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in an enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, the requirements of this administrative regulation shall apply to the source or modification as though construction had not yet commenced on the source or modification.
- (5)(a) The provisions of this subsection shall apply to projects at existing emissions units at a major stationary source other than projects at [a clean unit or at] a source with a PAL, if:
- 1. There is a reasonable possibility that a project that is not part of a major modification may result in a significant emissions increase; and
- 2. The owner or operator uses the method specified in 401 KAR 51:001, Section $1(\underline{199})(b)[(\underline{202})(b)]$ to calculate projected actual emissions.
- (b) Before beginning actual construction of a project specified in paragraph (a) of this subsection, the owner or operator shall document and maintain a record of the following information:

- 1 1. A description of the project:
- Identification of the emissions units for which emissions of a regulated NSR
- 3 pollutant may be affected by the project; and
- 4 3. A description of the applicability test used to determine that the project is not a
- 5 major modification for any regulated NSR pollutant, including:
- 6 a. Baseline actual emissions;
- 7 b. Projected actual emissions;
- c. Amount of emissions excluded in calculating projected actual emissions and an explanation for why that amount was excluded; and
- d. Any applicable netting calculations.
- 11 (c) For a project specified in paragraph (a) of this subsection, the owner or operator shall:
- 1. Monitor the emissions of any regulated NSR pollutant that could increase as a 14 result of the project and that are emitted by an emissions unit identified in paragraph 15 (a)2 of this subsection; and
- 2. Calculate and maintain a record of the annual emissions, in tons per year on acalendar year basis, for:
- a. Five (5) years following resumption of regular operations after the change; or
- b. Ten (10) years if the project increases the design capacity of or potential to
 emit for that regulated NSR pollutant at the emissions unit.
- 21 (d) If the unit is an existing EUSGU, before beginning actual construction, the 22 owner or operator:
- 1. Shall provide a copy of the information in paragraph (b) of this subsection to

1 the cabinet; and

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- 2 2. Shall not be required to obtain a determination from the cabinet before beginning actual construction; and
- 3. Shall submit a report to the cabinet within sixty (60) days after the end of each year during which records are required to be generated under paragraph (b) of this subsection that contains the unit's annual emissions during the calendar year preceding report submittal.
- 8 (e)1. For an existing unit other than an EUSGU, the owner or operator shall submit a report to the cabinet if:
 - a. The annual emissions, in tons per year, from a project identified in paragraph

 (a) of this subsection exceed the baseline actual emissions, as documented and
 maintained pursuant to paragraph (b)3 of this subsection, by a significant amount for
 that regulated NSR pollutant; and
 - b. The emissions differ from the preconstruction projection as documented and maintained pursuant to paragraph (b)3 of this subsection.
- 2. The report shall be submitted to the cabinet within sixty (60) days after the end of the year during which records are required to be generated under paragraph (b) of this subsection and shall contain the following:
 - a. The name, address, and telephone number of the major stationary source;
- 20 b. The annual emissions as calculated pursuant to paragraph (c) of this 21 subsection; and
- c. Any other information that the owner or operator wishes to include in the report.

- (f) The owner or operator of the source shall make the information required to be
 documented and maintained under this subsection available for review upon request for
 inspection by the cabinet or the general public pursuant to 401 KAR 52:100.
- Section 8. Permit Condition Rescission. (1) An owner or operator holding a permit for a stationary source or modification that [which] was issued pursuant to 401 KAR 51:050 or [401 KAR] 51:051E may request that the cabinet rescind the applicable conditions.
- 8 (2) The cabinet shall rescind a permit condition if the owner or operator:
 - (a) Requests and [if requested and the applicant] demonstrates to the satisfaction of the cabinet that this administrative regulation does not apply to the source or modification or to a portion of the source or modification if construction will have commenced after September 22, 1982; and
- (b) Demonstrates [1982, and if the owner or operator demonstrates] that the
 rescission will not violate the requirements of Sections 4(3) and 7 of this administrative
 regulation.
- Section 9. Class I Areas. (1) The following <u>areas</u>, [areas] which were in existence on August 7, 1977, shall be Class I areas and shall not be redesignated:
- (a) International parks;

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- (b) National wilderness areas and national memorial parks which exceed 5,000
 acres in size; and
- 21 (c) National parks that exceed 6,000 acres in size.
- (2) Any other area, unless otherwise specified in the legislation creating the area,
 is designated Class II but may be redesignated as provided in 40 C.F.R. 51.166(g).

- (3) The visibility protection requirements of this administrative regulation shall
 apply only to sources that may impact a mandatory Class I federal area.
 - (4) The following areas may be redesignated only as Class I or II:

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- 4 (a) An area which as of August 7, 1977, exceeded 10,000 acres in size and was
 5 a national monument, a national primitive area, a national preserve, a national
 6 recreational area, a national wild and scenic river, a national wildlife refuge, a national
 7 lakeshore or seashore; and
 - (b) A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size.
- Section 10. Protection of Visibility. (1) New source <u>review;</u> [review-] applicability and exemptions.
 - (a) A stationary source or modification to which this section applies shall not begin actual construction without a permit that states the stationary source or modification shall meet the requirements of this section.
 - (b) This section shall apply to construction of a new major stationary source or major modification that will be constructed in an area designated as nonattainment under 42 U.S.C. 7407(d)(1)(A)(i) and potentially have an impact on visibility in a Class I area.
- (c) This section shall apply to a major stationary source or major modification for each pollutant subject to regulation under 42 U.S.C. 7401 to 7626 that it will emit, except as provided in paragraphs (d) and (e) of this subsection.
 - (d) This section shall not apply to a particular major stationary source or major modification if:

1	1. The source or modification is a nonprofit health or nonprofit educational
2	institution, or a major modification will occur at the institution, and the Governor of the
3	Commonwealth requests that it be exempt from the requirements of this section; and
4	2. The source is a portable stationary source that has previously received a
5	permit under this section and will be temporarily relocated; and:
6	a. [relocated,] The emissions from the source will not exceed the allowable
7	emissions;
8	b. The emissions from the source will not impact a Class I area or an area where
9	an applicable increment is known to be violated; and
10	c. Reasonable notice is given to the cabinet prior to the relocation, identifying the
11	proposed new location and the probable duration of operation at the new location. The
12	notice shall be given to the cabinet not less than ten (10) days in advance of the
13	proposed relocation unless a different time duration is previously approved by the
14	cabinet pursuant to this section. [cabinet.]
15	(e) This section shall not apply to a major stationary source or major modification
16	with respect to a particular pollutant, if the allowable emissions of that pollutant from the
17	source, or the net emissions increase of that pollutant from the modification:
18	Will not impact a Class I area;
19	2. Will not impact an area where an applicable increment is known to be violated;

21 3. Will be temporary.

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and

(2) Visibility impact analyses. The owner or operator of a source shall provide an analysis of the impairment to visibility that will occur in a Class I area as a result of the

- source or modification and general commercial, residential, <u>industrial</u>, and <u>[industrial]</u>
 and other growth associated with the source or modification.
 - (3) Federal land manager notification.

- (a) The federal land manager and the federal official charged with direct responsibility for management of Class I areas shall have an affirmative responsibility to protect the visibility and other air quality related values of the Class I lands and to consider, in consultation with the cabinet, if a proposed source or modification will have an adverse impact on these values.
- (b) The cabinet shall provide written notification to all affected federal land managers and to the federal official charged with direct responsibility for management of lands within the Class I area of a permit application or an advanced notice of a permit application for a proposed new major stationary source or major modification that may affect visibility in a Class I area. The notification shall:
- Include a copy of all information relevant to the permit application;
- 2. Be submitted pursuant to this paragraph [(b) of this subsection] within thirty

 (30) days of receipt of the permit application or advanced notice of permit application

 and at least sixty (60) days prior to a public hearing on the application for a permit to

 construct; and
 - 3. <u>Include</u> [include] an analysis of the proposed source's anticipated impacts on visibility in a Class I area.
 - (c)1. The cabinet shall consider an analysis by the federal land manager, provided within thirty (30) days of the notification and analysis required by paragraph (b) of this subsection, that the proposed new major stationary source or major modification

1 may have an adverse impact on visibility in a Class I area.

- 2. If the cabinet finds that the analysis does not demonstrate, to the satisfaction of the cabinet, that an adverse impact on visibility will result in the Class I area, the cabinet shall, in the public hearing notice required in 401 KAR 52:100, either explain that decision or give notice as to where the explanation can be obtained.
 - (d) Adverse impact on visibility as it applies to paragraph (c) of this subsection shall be determined on a case-by-case basis, taking into account the geographic extent, intensity, duration, frequency, and time of visibility impairments, and how these factors correlate with the times of visitor use of the Class I area, and the frequency and time of natural conditions that reduce visibility.
- (4) Public participation. The cabinet shall follow the applicable procedures of 401 KAR 52:100 in processing applications under this <u>section and</u> [section. The cabinet] shall follow the procedures at 40 C.F.R. <u>52.21(r)</u>, effective [52.21(r) as in effect on] July 1, 2003, to the extent that the procedures of 401 KAR 52:100 do not apply.
 - (5) National visibility goal.
- (a) The cabinet shall only issue permits to those sources for which emissions will be consistent with making reasonable progress toward the national goal of preventing future, and remedying existing, impairment of visibility in Class I areas which impairment results from manmade air pollution.
 - (b) In making the decision to issue a permit, the cabinet may take into account the overriding factors of:
- 22 1. The cost of compliance;
- 23
 2. The time necessary for compliance;

1 3. The energy and non-air [nonair] quality environmental impacts of compliance; 2 and 3 4. The useful life of the source. 4 (6) Monitoring. 5 (a) The cabinet may require monitoring of visibility in a Class I area near the 6 proposed new stationary source or major modification using human observations, 7 teleradiometers, photographic cameras, nephelometers, fine particulate monitors, or 8 other appropriate methods as specified by the U.S. EPA. 9 (b) The monitoring method selected shall be determined on a case-by-case basis 10 by the cabinet. 11 (c) The cabinet shall not undertake visibility monitoring in a Class I area without 12 the approval of the federal land manager. 13 (d) Data obtained from visibility monitoring shall be made available to the cabinet, 14 the federal land manager, and the U.S. EPA, upon request. 15 Section 11. Clean Unit Test for Emissions Units that are Subject to LAER. For 16 any emissions unit that is subject to LAER and for which the cabinet has issued a major 17 NSR permit in the past ten (10) years, an owner or operator of a major stationary source 18 may use the clean unit test provisions specified in this section to determine if an 19 emissions increase at a clean unit is part of a project that is a major modification. 20 (1) General provisions for clean units. 21 (a) The cabinet shall make a separate clean unit designation for each pollutant 22 emitted by an emissions unit for which the emissions unit qualifies as a clean unit. 23 (b) A project for which the owner or operator begins actual construction shall be

1 considered to have occurred while the emissions unit is a clean unit, if actual 2 construction begins: 3 1. After the effective date of the clean unit designation as determined according 4 to subsection (3) of this section: and 5 2. Before the expiration date of the clean unit designation as determined 6 according to subsection (4) of this section. (c) For an emissions unit to retain its clean unit designation during a project at a 8 clean unit, the project shall not: 9 1. Cause the need for a change in the emissions limitations or work practice requirements adopted in conjunction with LAER in the permit for the unit; and 10 11 2. Alter any physical or operational characteristics that formed the basis for the 12 LAER determination as specified in subsection (5)(d) of this section. 13 - (d) Unless an emissions unit requalifies as a clean unit according to subsection 14 (2)(b) of this section, the unit shall lose its designation as a clean unit upon issuance of 15 the necessary permit revisions if: 16 1. The project causes the need for a change in the emissions limitations or work 17 practice requirements that were determined in conjunction with LAER in the permit for 18 the unit; or 19 2. The project will alter any physical or operational characteristics that formed the 20 basis for the LAER determination as specified in subsection (5)(d) of this section. 21 (e) Clean unit designation shall end immediately before the time actual 22 construction begins on a project that will cause a unit to lose its clean unit designation if 23 the owner or operator begins actual construction on a project before applying for a

1 permit revision. 2 (f) A project that causes an emissions unit to lose its clean unit designation shall 3 be subject to the applicability requirements of Section 1(2)(a)1, 2, and 4 and (b) of this 4 administrative regulation as if the emissions unit is not a clean unit. 5 (g)1. For emissions units with PSD permits, the BACT level of emissions 6 reductions or work practice requirements shall satisfy the requirement for meeting LAER 7 in subsections (3) to (8) of this section if: 8 - a. The emissions unit has received a PSD permit that complies with BACT within 9 the last ten (10) years; and 10 b. The emissions unit is located in an area that was redesignated as 11 nonattainment for the relevant pollutant after the PSD permit is issued and before the 12 SIP including the clean unit provisions become effective. 13 2. For these emissions units, the requirements for the LAER determination made 14 under subsection (1)(c) of this section shall apply to the BACT permit terms and 15 conditions. 16 3. The requirements of subsection (6)(a)3 of this section shall not apply to emissions units that qualify for clean unit status according to this paragraph. 17 18 (2) Qualifying or requalifying to use the clean unit applicability test. (a) An emissions unit shall automatically qualify as a clean unit if the unit meets 19 20 the requirements in this paragraph. 21 -1. Permitting requirement. The owner or operator of an emissions unit shall have 22 received a major NSR permit within the past ten (10) years and shall maintain and 23 provide information upon request by the cabinet or U.S. EPA to demonstrate that this

1	permitting requirement is met.
2	- 2. Qualifying air pollution control technologies requirement. Air pollutan
3	emissions from the emissions unit shall be reduced through the use of air pollution
4	control technology, including pollution prevention or work practices, that meets the
5	following requirements:
6	a. The control technology shall achieve the LAER level of emissions reductions
7	determined by issuance of a major NSR permit within the past ten (10) years;
8	b. The emissions unit shall not be eligible for the clean unit designation if the
9	LAER determination did not result in a requirement to reduce emissions below the level
10	of a standard, uncontrolled, new emissions unit of the same type; and
11	
12	technology. An investment includes expenses to research the application of, or to
13	actually apply, a pollution prevention technique to the emissions unit or to-retool the unit
14	to apply a pollution prevention technique.
15	(b) Requalifying for the clean unit designation. After the original clean unit
16	designation expires or is lost, an emissions unit may requalify as a clean unit under the
17	provisions of this paragraph or under Section 12 of this administrative regulation.
18	1. An owner or operator shall obtain a new major NSR permit or permit revision,
19	as applicable, issued pursuant to 401 KAR 52:020 for an emissions unit that is
20	requalifying for clean unit designation.
21	— 2. The permit shall require compliance with the current-day LAER, and the
22	emissions unit shall meet the requirements in subsection (3)(a) of this section.
23	——————————————————————————————————————

1 operator may begin to use the clean unit test to determine if a project involving an 2 emissions unit is a major modification shall be determined according to paragraph (a) or 3 (b) of this subsection, as applicable. 4 (a) The effective date for an original clean unit designation and for an emissions 5 unit that requalifies as a clean unit by implementing a new control technology to meet 6 current-day LAER shall be: 7 1. The earlier of the date the emissions unit's air pollution control technology is 8 placed into service or three (3) years after the date the major NSR permit or permit 9 revision is issued; and 10 2. No sooner than the date that provisions for clean units become effective in the 11 Kentucky SIP. 12 (b) The effective date for emissions units that requalify for the clean unit 13 designation using an existing control technology shall be the date the new major NSR 14 permit or permit revision is issued. 15 (4) Clean unit expiration. The date that the owner or operator shall no longer be 16 allowed to use the clean unit test to determine if a project involving an emissions unit is, 17 or is part of, a major modification shall be determined according to paragraph (a) or (b) 18 of this subsection, as applicable. 19 (a) For an emissions unit that automatically qualifies as a clean unit under 20 subsection (2)(a) of this section or a unit that requalifies by implementing new control 21 technology to meet current day LAER, the expiration date of the clean unit designation 22 shall be: 23 1. Ten (10) years after the effective date or ten (10) years after the date the

1 equipment went into service, whichever is earlier; or 2 2. At any time the owner or operator fails to comply with the provisions for 3 maintaining the clean unit designation pursuant to subsection (6) of this section. 4 (b) The clean unit designation for an emissions unit that regualifies for the clean 5 unit designation using an existing control technology shall expire: 6 - 1. Ten (10) years after the effective date; or 7 2. At any time the owner or operator fails to comply with the provisions for 8 maintaining the clean unit designation in subsection (6) of this section. 9 (5) Required Title V permit content for a clean unit. The Title V permit for a major 10 stationary source with a clean unit shall, after the effective date of the clean unit 11 designation and in accordance with the applicable provisions of 401 KAR Chapter 52. 12 but not later than the date the Title V permit is renewed, include the following terms and 13 conditions: 14 —— (a) A statement indicating that the emissions unit qualifies as a clean unit and 15 identifying the pollutant for which this clean unit designation applies. 16 (b) The effective date of the clean unit designation. 17 - 1. If the exact effective date is not known on the date the clean unit designation is 18 initially recorded in the Title V permit, the permit or permit revision shall describe the 19 event that shall determine the effective date. Once the effective date is determined, the 20 owner or operator shall notify the cabinet of the exact date; and 21 2. If originally absent from the Title V permit, the effective date of the clean unit 22 shall be added to the source's Title V permit at the first opportunity the permit is opened, 23 but not later than the next renewal.

- (c) The expiration date of the clean unit designation. 1 2 1. If the exact expiration date is not known at the date the clean unit designation 3 is initially recorded in the Title V permit, the permit shall describe the event that shall 4 determine the expiration date: 5 - 2. Once the expiration date is determined, the owner or operator shall notify the 6 cabinet of the exact date; and 7 --- 3. If originally absent for the Title V permit, the expiration date shall be added to 8 the source's Title V permit at the first opportunity the permit is opened, but not later than 9 the next renewal. 10 — (d) All emissions limitations and work practice requirements adopted in 11 conjunction with LAER and any physical or operational characteristics that formed the 12 basis for the LAER determination. 13 - (e) Monitoring, recordkeeping, and reporting requirements as necessary to 14 demonstrate that the emissions unit continues to meet the criteria for maintaining the 15 clean unit designation pursuant to subsection (6) of this section. 16 - (f) Terms reflecting the owner or operator's duty to maintain the clean unit 17 designation and the consequences of failing to do so, pursuant to subsection (6) of this 18 section. 19 (6) Maintaining the clean unit designation. 20 -----(a) The owner or operator of a clean unit shall conform to the provisions of this 21 subsection to maintain the clean unit designation. 22 1. The clean unit shall comply with the emissions limitations or work practice 23 requirements adopted in conjunction with the LAER that are recorded in the major NSR

1	permit and subsequently reflected in the Little V permit;
2	2. The owner or operator shall not make a physical change in or change in the
3	method of operation of the clean unit that causes the emissions unit to function in a
4	manner that is inconsistent with the physical or operational characteristics that formed
5	the basis for the LAER determination;
6	3. The clean unit shall not emit above a level that has been offset.
7	
8	related to the unit's clean unit designation; and
9	5. The clean unit shall continue to control emissions using the specific air
10	pollution control technology that is the basis for its clean unit designation. The clean unit
11	designation shall end if the emissions unit or control technology is replaced.
12	(b) The requirements of this subsection shall apply to each pollutant for which the
13	cabinet has designated an emissions unit a clean unit. Failing to conform to the
14	restrictions for one (1) pollutant shall only affect the clean unit designation for that
15	pollutant.
16	——————————————————————————————————————
17	—— (a) Emissions changes that occur at a clean unit shall not be included in
18	calculating a significant net emissions increase to be used in a netting analysis or for
19	generating offsets, unless:
20	1. Such use occurs before the effective date of the clean unit designation, or after
21	the clean unit designation expires; or
22	2. The emissions unit reduces emissions below the level that qualified the unit as
23	a clean unit.

1 (b) The owner or operator may generate a credit for the difference between the 2 level that qualified the unit as a clean unit and the new emissions limitation, if: 3 1. The unit reduces emissions below the level that qualified the unit as a clean 4 unit; and 5 2. The reductions are surplus, quantifiable, and permanent. 6 (c) For generating offsets, reductions shall be federally enforceable. 7 8 reductions shall also be enforceable as a practical matter. 9 (8) Effect of area redesignation on clean units. (a) The clean unit designation of an emissions unit shall not be affected by 10 11 redesignation of the attainment status of the area in which it is located. 12 (b) If an existing clean unit designation expires or is lost, the unit shall requalify as a clean unit according to the requirements currently applicable in the area, 13 14 regardless of the area's original attainment status during the previous designation 15 period. 16 Section 12. Clean Unit Provisions for Emissions Units that Achieve an Emissions 17 Limitation Comparable to LAER. For an emissions unit that does not qualify as a clean 18 unit under Section 11 of this administrative regulation but is achieving a level of 19 emissions control comparable to LAER, the owner or operator of a major stationary 20 source may use the clean unit test provisions specified in this section to determine if an 21 emissions increase at the unit is part of a project that is a major modification. 22 (1) General provisions for clean units. — (a) The cabinet shall make a separate clean unit designation for each pollutant 23

1	emitted by an emissions unit for which the emissions unit qualifies as a clean unit.
2	—— (b) A project for which the owner or operator begins actual construction shall be
3	considered to have occurred while the emissions unit is a clean unit, if actual
4	construction begins:
5	1. After the effective date of the clean unit designation as determined pursuant to
6	subsection (4) of this section; and
7	2. Before the expiration date of the clean unit designation as determined
8	pursuant to subsection (5) of this section.
9	(c) For an emissions unit to retain its clean unit designation during a project at a
10	clean unit, the project shall not:
11	- 1. Cause the need for a change in the emissions limitations or work practice
12	requirements in the permit for the unit that have been determined to be comparable to
13	LAER according to subsection (3) of this section; and
14	2. Alter any physical or operational characteristics that formed the basis for
15	determining that the emissions unit's control technology achieves a level of emissions
16	control comparable to LAER according to subsection (7)(d) of this section.
17	——————————————————————————————————————
18	(2)(b) of this section, the unit shall lose its designation as a clean unit upon issuance of
19	the necessary permit revisions, if
20	1. The project causes the need for a change in the emissions limitations or work
21	practice requirements in the permit for the unit-that have been determined to be
22	comparable to LAER; or
)3	2. The project will often any physical or energianal characteristics that formed the

1 basis for determining that the emissions unit's control technology achieves a level of 2 emissions control comparable to LAER. 3 (e) Clean unit designation shall end immediately before the time actual 4 construction begins on a project that will cause a unit to lose its clean unit designation, if 5 the owner or operator begins actual construction on a project before applying for a 6 permit revision. 7 (f) A project that causes an emissions unit to lose its clean unit designation shall 8 be subject to the applicability requirements of Section 1(2)(a)1, 2, and 4 and (b) of this 9 administrative regulation as if the emissions unit were never a clean unit. 10 11 (a) An emissions unit shall qualify as a clean unit if the unit meets the 12 requirements of this paragraph. 13 14 from an emissions unit shall be reduced through the use of air pollution control 15 technology, including pollution prevention-or-work practices, and the owner or operator 16 shall: 17 a. Demonstrate that an emissions unit's control technology is comparable to 18 LAER according to the requirements of subsection (3) of this section; 19 b. Demonstrate that an emissions unit's control technology reduces emissions 20 below the level of a standard, uncontrolled emissions unit of the same type; and 21 - c. Have made an investment to install the control technology. An investment shall 22 include expenses to research the application of, or to actually apply, a pollution 23 prevention technique to the emissions unit or to retool the unit to apply a pollution

1	prevention technique.
2	2. Impact of emissions from the unit requirement. The allowable emissions from
3	the emissions unit, as determined by the cabinet, shall not:
4	a. Cause or contribute to a violation of any national ambient air quality standard
5	er-PSD increment; er
6	b. Adversely impact visibility or another air quality related value that has been
7	identified for a federal Class I area by a federal land manager and for which information
8	is available to the general public.
9	3. Date of installation requirement.
10	— a. For control technology installed before provisions for clean units are effective
11	in the Kentucky SIP, the owner or operator of an emissions unit with control technology
12	on which clean unit designation is based, shall apply for clean unit designation within
13	two (2) years after the requirements for clean units become effective in the Kentucky
14	SIP.
15	b. For control technology installed after the provisions for clean units become
16	effective in the Kentucky SIP, the owner or operator shall apply for clean unit
17	designation at the time the control technology is installed.
18	——————————————————————————————————————
19	after the original clean unit designation expires or is lost according to provisions in
20	subsections (6) and (7) of this section or under clean unit-provisions in Section 11 of this
21	administrative regulation:
22	1. The owner or operator shall obtain a new permit or permit revision pursuant to
23	subsections (6) and (7) of this section and 401 KAR 52:020 that demonstrates the

1	emissions unit's control technology is achieving a level of emissions control comparable
2	to current-day LAER.
3	2. The emissions unit shall meet the requirements in subsection (2)(a)1 and 2 of
4	this section.
5	——————————————————————————————————————
6	operator shall demonstrate that the emissions unit's control technology is comparable to
7	LAER under the provisions of either paragraph (a) or (b) of this subsection.
8	(a) Comparison of the control technology to previous LAER determinations.
9	1. An emissions unit's control technology shall be presumed to be comparable to
0	LAER if the control technology achieves an emissions limitation that is at least as
11	stringent as one of the five best performing similar sources for which a LAER
12	determination has been made within the preceding five (5) years and for which
13	information has been entered into the RACT/BACT/LAER clearinghouse.
14	2. To determine the accuracy of any presumptive determination that an achieved
15	in-practice control technology is comparable to LAER, the cabinet shall:
16	a. Consider any information on achieved-in-practice pollution contro
17	technologies that is provided during the public comment period; and
18	
19	cabinet is aware.
20	(b) The substantially-as-effective test. The owner or operator may demonstrate
21	that the emissions unit's control technology is substantially as effective as LAEF
22	according to this paragraph. The cabinet:
23	1 Shall consider the evidence on a case-by-case basis that an owner of

1 operator, and any other person during the public participation process, provides to the 2 cabinet to demonstrate if the emissions unit's control technology is substantially as 3 effective as LAER; and 4 2. Shall determine if the emissions unit's air pollution control technology is 5 substantially as effective as LAER after considering the evidence. (c) Time of comparison. 6 7 1. Emissions units with control technologies installed before provisions for clean 8 units are effective in the Kentucky SIP. The owner or operator of an emissions unit for 9 which control technology is installed before the provisions regarding clean units are 10 effective in the Kentucky SIP shall demonstrate to the cabinet that the emissions 11 limitation achieved by the emissions unit's control technology is comparable to: 12 - a. The LAER requirements that applied at the time the control technology was 13 installed; or 14 b. The current-day LAER requirements. 15 2. Emissions units with control technologies installed after provisions for clean 16 units are effective in the Kentucky SIP. The owner or operator of an emissions unit for 17 which control technology is installed after the provisions regarding clean units are 18 effective in the Kentucky SIP shall demonstrate to the cabinet that the emissions 19 limitation achieved by the emissions unit's control technology is comparable to current-20 day LAER requirements. 21 - (4) Effective date of the clean unit designation. The date that the owner or 22 operator may begin to use the clean unit test to determine if a project involving an 23 emissions unit is a major modification shall be the later of:

(a) The date that the permit or permit revision required by subsection (6) of this 1 2 section is issued; or 3 (b) The date that the emissions unit's air pollution control technology is placed 4 into service. 5 (5) Clean unit expiration. The date the owner or operator shall no longer be 6 allowed to use the clean unit test to determine if a project involving an emissions unit is, 7 or is part of, a major modification shall be determined according to this subsection. 8 (a) For an emissions unit with a clean unit designation based on a demonstration 9 by the owner or operator that the emissions unit's control technology is comparable to 10 the LAER requirements that applied at the time the control technology was installed, the 11 clean unit designation shall expire ten (10) years from the date the unit's control 12 technology was installed. 13 (b) For all other emissions units, the clean unit designation shall expire ten (10) 14 years from the effective date of the clean unit designation. 15 (c) The clean unit designation shall expire at any time the owner or operator fails 16 to comply with the provisions for maintaining the clean unit designation according to 17 subsection (8) of this section. 18 - (6) Procedures for designating emissions units as clean units. 19 —— (a) The cabinet shall designate an emissions unit a clean unit by issuing a permit 20 or permit revision under 401 KAR Chapter 52, including requirements for public notice 21 of the proposed clean unit designation and opportunity for public comment; and 22 (b) The permit or permit revision shall meet the requirements of subsection (7) of 23 this section.

(7) Required permit content. The Title V permit for a major stationary source with 1 2 a clean unit shall, after the effective date of the clean unit designation and in 3 accordance with the applicable provisions of 401 KAR Chapter 52, but not later than the 4 date the Title V permit is renewed, include the following terms and conditions: 5 (a) A statement indicating that the emissions unit qualifies as a clean unit and 6 identifying the pollutant for which the clean unit designation applies. 7 (b) The effective date of clean unit designation. 8 1. If the effective date is not known on the date the clean unit designation is 9 initially recorded in the Title V permit, the permit or permit revisions shall describe the 10 event that shall determine the effective date. Once the effective date is determined, the 11 owner or operator shall notify the cabinet of the exact date; and 12 2. If originally absent from the Title V permit, the effective date of the clean unit 13 shall be added to the source's Title V permit at the first opportunity the permit is opened, 14 but not later than the next renewal. 15 — (c) The expiration date of clean unit designation. 16 1. If the expiration date is not known on the date the clean unit designation is 17 initially recorded in the Title V permit, the permit or permit revision shall describe the 18 event that shall determine the expiration date; 19 2. Once the expiration date is determined, the owner or operator shall notify the 20 cabinet of the exact date; and 21 3. If originally absent from the Title V permit, the expiration date shall be added to 22 the source's Title V permit at the first opportunity the permit is opened, but not later than 23 the next renewal.

1 (d) All emissions limitations and work practice requirements adopted in 2 conjunction with emissions limitations necessary to assure the control technology 3 continues to achieve an emissions limitation comparable to LAER and any physical or 4 operational characteristics that formed the basis for determining that the emissions 5 unit's control technology achieves a level of emissions control comparable to LAER. 6 (e) Monitoring, recordkeeping, and reporting requirements as necessary to 7 demonstrate that the emissions unit continues to meet the criteria for maintaining the 8 clean unit designation pursuant to subsection (8) of this section. 9 - (f) Terms reflecting the owner or operator's duty to maintain the clean unit 10 designation and the consequences of failing to do so, according to subsection (8) of this 11 section. 12 (8) Maintaining the clean unit designation. 13 — (a) The owner or operator shall conform to the provisions of this subsection to 14 maintain clean unit status. 15 1. To ensure that the control technology continues to achieve emissions control 16 comparable to LAER, the clean unit shall comply with the emissions limitations or work 17 practice requirements adopted in conjunction with those that are comparable to LAER, 18 which are recorded in the source's major NSR permit or permit revisions and 19 subsequently reflected in the Title V permit that designates the unit as a clean unit. 20 2. The owner or operator shall not make a physical change in or change in the 21 method of operation of the clean unit that causes the emissions unit to function in a 22 manner that is inconsistent with the physical or operational characteristics that formed 23 the basis for the determination that the control technology is achieving a level of

1	emissions control that is comparable to LAER.
2	3. The clean unit shall not emit above a level that has been offset.
3	
4	related to the unit's clean unit designation.
5	
6	pollution control technology that was the basis for its clean unit designation. The clean
7	unit designation shall end if the emissions unit or control technology is replaced.
8	(b) The requirements of this subsection shall apply to each pollutant for which the
9	cabinet has designated an emissions unit a clean unit. Failing to conform to the
10	restrictions for one pollutant shall only affect the clean unit designation for that pollutant.
11	——————————————————————————————————————
12	(a) Emissions changes that occur at a clean unit shall not be included in
13	calculating a significant net emissions increase to be used in a netting analysis or for
14	offsets, unless:
15	1. Such use occurs before the date the clean unit provisions are effective in the
16	Kentucky SIP or after the clean unit designation expires; or
17	— 2. The emissions unit reduces emissions below the level that qualified the unit as
18	a clean unit.
19	————(b) The owner or operator may generate a credit for the difference between the
20	level that qualified the unit as a clean unit and the new emissions limitation, if:
21	1. The unit reduces emissions below the level that qualified the unit as a clean
22	unit; and
23	- 2. The reductions are surplus, quantifiable, and permanent.

1 - (c) For generating offsets, reductions shall be federally enforceable. — (d) For determining creditable net emissions increases and decreases, the 2 3 reductions shall be enforceable as a practical matter. 4 — (10) Effect of area redesignation on clean units. - (a) The clean unit designation of an emissions unit shall not be affected by 5 6 redesignation of the attainment status of the area in which it is located. (b) If an existing clean unit designation expires or is lost, the unit shall requalify 7 as a clean unit according to the requirements that are currently applicable in the area, 8 9 regardless of the area's original attainment status during the previous designation 10 period. Section 13. PCP Exclusion Procedural Requirements. For a project to qualify for 11 a PCP exclusion, an owner or operator shall comply with the provisions of this section. 12 —— (1) To request a PCP designation for a project the owner or operator shall: 13 —— (a) Submit a notice to the cabinet before beginning actual construction for a 14 project that is listed in the definition for "pollution control project" in 401 KAR 51:001, 15 16 Section 1(188)(a) to (f); or 17 - (b) Submit an application for a permit or permit revision and obtain approval to use the PCP exclusion from the cabinet according to subsection (5) of this section for a 18 project that is not listed in 401 KAR 51:001, Section 1(188)(a) to (f). 19 20 — (2) The owner or operator for all projects that rely on the PCP exclusion shall 21 perform: 22 -----(a) An environmentally-beneficial analysis. 23 — 1. The environmental benefit from the emissions reductions of pollutants

1 regulated under 42 U.S.C. 7401 to 7671q (Clean Air Act) shall outweigh the 2 environmental detriment of emissions increases in pollutants regulated under the Act; 3 and 2. A statement that the project is implementing a technology from those listed in 4 401 KAR 51:001, Section 1(188)(a) to (f) shall satisfy the requirement in subparagraph 5 6 1 of this paragraph. 7 (b) Air quality analysis. The emissions increases from the project shall not: 1. Cause or contribute to a violation of any national ambient air quality standard 8 9 or PSD increment; or 10 2. Adversely impact visibility or another air quality related value that has been 11 identified for a federal Class I area by a federal land manager and for which information 12 is available to the general public. 13 - (3) Content of notice or application for a permit or permit revision. The owner or operator shall include the following information in the notice or application for a permit or 14 15 permit revision submitted to the cabinet for a PCP: 16 ——— (a) A description of the project; 17 (b) The potential emissions increases and decreases of any pollutant regulated 18 under the Act and the projected emissions increases and decreases that will-result from 19 the project; 20 - (c) A copy of the environmentally-beneficial analysis required by subsection 21 (2)(a) of this section: 22 (d) A description of all methods, including monitoring and recordkeeping, that

shall be used on an ongoing basis to demonstrate that the project is environmentally

1 beneficial and sufficient to meet the applicable requirements of 401 KAR Chapter 52: 2 - (e) A certification that the project shall be designed and operated in a manner 3 that is consistent with: 4 1. The proper industry and engineering practices; 5 2. The environmentally-beneficial analysis and air quality analysis required by 6 subsection (2)(a) and (b) of this section; 7 3. The information submitted in the notice or permit application; and 8 4. Procedures that minimize emissions of collateral pollutants within the physical 9 configuration and operational standards usually associated with the emissions control 10 device or strategy. 11 (f) Demonstration that the PCP shall not have an adverse air quality impact. 12 - 1. The demonstration requirement may be satisfied with modeling, screening 13 level modeling results, a statement that the collateral emissions increase is included 14 within the parameters used in the most recent modeling exercise as required by 15 subsection (2)(b) of this section, or another method approved by the cabinet. 16 2. An air quality impact analysis shall not be required for any pollutant that will 17 not experience a significant emissions increase from the project. — (4) Notice process for listed projects. The owner or operator: 18 19 - (a) May begin actual construction of a PCP project immediately after notice is 20 sent to the cabinet for projects listed in the definition of "pollution control project" in 401 21 KAR 51:001, Section 1(188)(a) to (f); and 22 (b) Shall respond to any requests by the cabinet for additional information 23 necessary to evaluate the suitability of the project for a PCP exclusion.

— (5) Permitting process for unlisted projects. 1 2 ---- (a) The owner or operator shall not begin actual construction of a PCP that is not 3 listed in 401 KAR 51:001, Section 1(188)(a) to (f) until the cabinet approves and issues 4 a permit or permit revision for the project according to 401 KAR 52:020. These 5 procedures shall include the cabinet providing the public with: 6 Notice of the proposed approval; 7 2. Access to the environmentally-beneficial analysis and the air quality analysis; 8 and 9 3. At least a thirty (30) day period for the public and the U.S. EPA to submit 10 comments. 11 (b) The cabinet shall address all material comments received by the end of the 12 comment period before taking final action on the permit or permit revision. 13 (6) Operational requirements. Upon installation of the PCP, the owner or operator 14 shall comply with the requirements of this subsection. - (a) General duty. The owner or operator shall operate the PCP in a manner that 15 16 is consistent with: 17 1. Proper industry and engineering practices; 18 -- 2. The environmentally-beneficial analysis and air quality analysis required by subsection (2)(a) and (b) of this section; 19 20 3. Information submitted in the notice or application for a permit or permit revision 21 required by subsection (3) of this section; and 22 4. Procedures that minimize emissions of collateral pollutants within the physical 23 configuration and operational standards usually associated with the emissions control

1 device or strategy. 2 (b) Recordkeeping. To prove that the PCP is operated consistent with the 3 general duty requirements in paragraph (a) of this subsection, the owner or operator 4 shall maintain copies on site, of: 5 1. The environmentally-beneficial analysis: 6 - 2. The air quality impacts analysis; and, 7 3. The monitoring and other emissions records. 8 (c) Permit requirements. The owner or operator shall comply with all provisions in 9 a permit issued under 401 KAR 52:020 related to use and approval of the PCP 10 exclusion. 11 (d) Generation of emissions reduction credits. 12 1. Emissions reductions created by a PCP shall not be included in calculating a 13 significant net emissions increase or for generating offsets, unless the emissions unit 14 further reduces emissions after qualifying for the PCP exclusion. 15 — 2. The owner or operator may generate a credit for the difference between the 16 level of reduction that was used to qualify for the PCP exclusion and the new emissions 17 limitation if such reductions are surplus, quantifiable, and permanent. 18 - 3. For generating offsets, the reductions shall also be federally enforceable. 19 - 4. For determining creditable net emissions increases and decreases, the 20 reductions shall also be enforceable as a practical matter.] 21 Section 11.[14.] Plant-wide Applicability Limit Provisions. The cabinet may 22 approve the use of an actuals PAL (PAL) for an existing major stationary source if the 23 PAL meets the requirements of this section.

1 (1) General provisions.

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- 2 (a) An owner or operator may execute a project without triggering major NSR, if 3 the source maintains its total source-wide emissions below the PAL level, meets the 4 requirements in this section, and complies with the PAL permit. If these conditions are 5 met, a project:
- Shall not be considered a major modification for the PAL pollutant;
- 7 2. Shall not have to be approved through Kentucky's major NSR program; and
 - 3. Shall not be subject to the provisions of Section 7(4) of this administrative regulation concerning restrictions on relaxing enforceable emissions limitations that the major stationary source used to avoid applicability of the major NSR program.
 - (b) Except as provided under subparagraph (1)(a)3 of this section, the major stationary source shall continue to comply with all applicable federal or state requirements, emissions limitations, and work practice requirements that were established prior to the effective date of the PAL.
 - (c) The cabinet shall not allow a PAL for VOC or NOx for any major stationary source located in an extreme ozone nonattainment area.
 - (2) Permit application requirements. The owner or operator of a major stationary source shall submit the following information to the cabinet for approval as part of an application for a permit or permit revision requesting a PAL:
 - (a) A list of all emissions units at the source designated as small, significant or major, based on their potential to emit;
- (b) Identification of the federal and state applicable requirements, emissions
 limitations, and work practice requirements that apply to each emissions unit;

1 (c) Calculations of the baseline actual emissions for the emissions units with 2 supporting documentation; and

- (d) The calculation procedures the owner or operator proposes to use to convert the monitoring system data to monthly emissions and annual emissions based on a twelve (12) month rolling total for each month as required by subsection (12)(a) of this section.
- (3) Establishing a PAL. The cabinet shall establish a PAL at a major stationary source in a federally enforceable permit pursuant to the requirements of this section.
- (a) The PAL shall impose an annual emissions limitation in tons per year that is enforceable as a practical matter for the entire major stationary source, <u>in which:</u>
 [where:]
 - 1. For each month during the PAL effective period after the first twelve (12) months of establishing a PAL, the owner or operator shall <u>demonstrate</u> [shew] that the sum of the monthly emissions from each emissions unit under the PAL for the previous twelve (12) consecutive months is less than the PAL as a twelve (12) month average, rolled monthly; and
- 2. For each month during the first eleven (11) months from the PAL effective date, the owner or operator shall <u>demonstrate</u> [show] that the sum of the preceding monthly emissions from the PAL effective date for each emissions unit under the PAL is less than the PAL;
- 21 (b) The PAL shall be established in a PAL permit that:
- 22 1. Meets the public participation requirements in subsection (4) of this section; 23 and

- Contains all the requirements of subsection (6) of this section;
- 2 (c) A PAL shall include fugitive emissions, to the extent quantifiable, from all
- 3 emissions units that emit or have the potential to emit the PAL pollutant at the major
- 4 stationary source;
- 5 (d) Each PAL shall regulate emissions of only one (1) pollutant;
- 6 (e) Each PAL shall have a PAL effective period of ten (10) years;
- 7 (f) The owner or operator of a major stationary source with a PAL shall comply
- 8 with the monitoring, recordkeeping, and reporting requirements of subsections (11) to
- 9 (13) of this section for each emissions unit under the PAL through the PAL effective
- 10 period; and
- (g) Emissions reductions of a PAL pollutant that occur during the PAL effective
- period shall not be creditable as decreases for offsets under 40 C.F.R. 51.165(a)(3)(ii),
- 13 unless:
- 1. The level of the PAL is reduced by the amount of the [such] emissions
- 15 reductions; and
- The reductions would be creditable in the absence of the PAL.
- 17 (4) Public participation requirements. PALs for existing major stationary sources
- 18 shall be established, renewed, or increased pursuant to this subsection and the
- applicable procedures of 401 KAR 52:100 for issuing permits or permit revisions. The
- 20 cabinet shall:
- 21 (a) Provide the public with notice of the proposed approval of a PAL permit with
- 22 at least a thirty (30) day period for submittal of public comment; and
- 23 (b) Address all material comments before taking final action on a PAL permit or

1 permit revision.

- (5) Setting the ten (10) year PAL level.
 - (a) The PAL level for a major stationary source shall be the sum of the baseline actual emissions of the PAL pollutant for each emissions unit at the source during the chosen twenty-four (24) month period plus the applicable significant level for the PAL pollutant under the definition for "significant" in 401 KAR 51:001, Section 1[(221)] or under 42 U.S.C. 7401-7671q, [the Act,] whichever is lower.
 - (b) In establishing a PAL level for a PAL pollutant, only one (1) consecutive twenty-four (24) month period shall be used to determine the baseline actual emissions for all existing emissions units.
 - (c) A different consecutive twenty-four (24) month period may be used for each different PAL pollutant.
 - (d) Emissions associated with units that were permanently shutdown after the chosen twenty-four (24) month period shall be subtracted from the PAL level.
 - (e) Emissions from units for which actual construction began after the twenty-four (24) month period shall be added to the PAL level in an amount equal to the potential to emit of the units.
 - (f) The cabinet shall specify a reduced PAL level in the PAL permit to become effective on the future compliance date of any applicable federal or state regulatory requirement that the cabinet is aware of prior to issuance of the PAL permit.
 - (6) Contents of the PAL permit. The PAL permit shall contain the following information:
 - (a) The PAL pollutant and the applicable source-wide emissions limitation in tons

1 per year;

- 2 (b) The PAL permit effective date and the expiration date of the PAL or PAL 3 effective period;
 - (c) Specification in the PAL permit that if a major stationary source owner or operator applies to renew a PAL under subsection (9) of this section before the end of the PAL effective period, the PAL shall remain in effect until a revised PAL permit is issued by the cabinet:
 - (d) A requirement that emissions calculations for compliance purposes include emissions from startups, shutdowns, and [shutdowns and] malfunctions;
 - (e) A requirement that, once the PAL expires, the major stationary source <u>shall</u>
 be [is] subject to the requirements of subsection (8) of this section;
 - (f) The calculation procedures that the major stationary source owner or operator shall use to convert the monitoring system data to monthly emissions and annual emissions based on a twelve (12) month rolling total for each month as required by subsection (12)(a) of this section;
 - (g) A requirement that the major stationary source owner or operator shall monitor all emissions units in accordance with the provisions in subsection (12) of this section;
- (h) A requirement that the owner or operator shall retain the records required under subsection (12) of this section on site. Records may be retained in an electronic format or another acceptable format approved by the cabinet;
- 22 (i) A requirement for the owner or operator to submit, by the reports required 23 under subsection (13) of this section by the required deadlines; and

- 1 (j) Any [Other] requirements necessary to implement and enforce the PAL.
- 2 (7) PAL effective period and reopening of a PAL permit.
- 3 (a) A PAL effective period shall be ten (10) years.
- 4 (b) The cabinet shall reopen a PAL permit to:
- 5 1. Correct typographical or calculation errors made in setting the PAL;
- 6 2. Reflect a more accurate determination of emissions used to establish the PAL;
- Reduce the PAL if the owner or operator of the major stationary source.
- 8 creates creditable emissions reductions for use as offsets under 40 C.F.R.
- 9 51.165(a)(3)(ii); or
- 4. Revise the PAL to reflect an increase in the PAL according to subsection (10)of this section.
- 12 (c) The cabinet may reopen the PAL permit, during the PAL effective period, to:
- 13 1. Reduce the PAL to reflect newly applicable federal requirements with compliance dates after the PAL effective date:
- Reduce the PAL consistent with any other requirement:
- 16 a. That is enforceable as a practical matter; and
- b. That may be imposed on the major stationary source under the SIP; and
- 3. Reduce the PAL if the cabinet determines that a reduction is necessary to avoid causing or contributing to:
- a. A National Ambient Air Quality Standard (NAAQS) or PSD increment violation;
- 21 or
- b. An adverse impact on visibility or another air quality related value that has
 been identified for a federal Class I area by a federal land manager and for which

1 information is available to the general public.

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2 (d) All permit reopenings shall be carried out under the public participation 3

requirements of subsection (4) of this section except for permit reopenings to correct

- 4 typographical or calculation of errors that do not increase the PAL level.
- 5 (8) Expiration of a PAL. A PAL that is not renewed shall expire at the end of the 6 PAL effective period and the requirements of this subsection shall then apply.
- 7 (a) Each emissions unit, or each group of emissions units, that existed under the 8 PAL shall comply with an allowable emissions limitation under a revised permit 9 established as follows:
 - An owner or operator of a major stationary source using a PAL shall submit a proposed allowable emissions limitation for each emissions unit, or each group of emissions units, by distributing the PAL allowable emissions for the major stationary source among each of the emissions units that existed under the PAL.
 - a. This proposal shall be submitted to the cabinet at least six (6) months before the expiration of the PAL permit but not sooner than eighteen (18) months before permit expiration.
 - b. If the PAL has not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as required under subsection (9)(e) of this section, distribution of allowable emissions shall be made as if the PAL has been adjusted.
 - 2. The cabinet shall provide [decide] the date and procedure the owner or operator shall use to distribute the PAL allowable emissions.
- 23 3. The cabinet shall issue a revised permit incorporating allowable limits for each

- 1 emissions unit, or each group of emissions units, as the cabinet determines is2 appropriate.
 - (b) Each emissions unit shall comply with the allowable emissions limitation on a twelve (12) month rolling basis. The cabinet may approve the use of monitoring systems other than CEMS, CERMS, PEMS, or [PEMS or] CPMS to demonstrate compliance with the allowable emissions limitation.
 - (c) The source shall continue to comply with a source-wide, multiunit emissions cap equivalent to the level of the PAL emissions limitation until the cabinet issues the revised permit incorporating allowable limits for each emissions unit or each group of emissions units.
 - (d) A major modification at the major stationary source shall be subject to major NSR requirements.
 - (e) The major stationary source owner or operator shall continue to comply with any state or federal applicable requirements eliminated by the PAL that applied during or before the PAL effective period, except for those emissions limitations established pursuant to Section 7(4) of this administrative regulation.
 - (9) Renewal of a PAL.

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- (a) Public participation requirements.
- 1. The cabinet shall follow the public participation procedures specified in subsection (4) of this section in approving a request to renew a PAL for a major stationary source.
- 22 2. The cabinet shall provide a written rationale for the proposed PAL level for public review and comment.

- 3. Any person may propose a PAL level for the source for consideration by the
 cabinet during the public review period.
- (b) Application deadline.
- 1. A major stationary source owner or operator shall submit an application for renewal of a PAL at least six (6) months before the date of permit expiration but not earlier than eighteen (18) months before permit expiration.
- 7
 2. The deadline for application submittal shall ensure that the permit shall not
 8 expire before the permit is renewed.
 - 3. If a complete application for renewal is submitted within the timeframe specified in subparagraph 1 of this paragraph, the PAL shall continue to be effective until the revised permit with the renewed PAL is issued.
- 12 (c) Application requirements. The application to renew a PAL permit shall contain:
- 1. The information required in subsection (2) of this section;
- 2. A proposed PAL level;

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- 3. The sum of the potential to emit of all emissions units under the PAL withsupporting documentation; and
- 4. Any other information the owner or operator wishes the cabinet to consider in
 determining the appropriate level to renew the PAL.
- 20 (d) PAL adjustment.
- 1. A PAL shall not exceed the source's potential to emit. The cabinet shall adjust the PAL downward to a level <u>not</u> [ne] greater than the potential to emit if a source's potential to emit has declined below the PAL level.

1	2. The cabinet may renew the PAL at the same level as the current PAL v	vithout
2	considering the factors of the same of the	

- considering the factors specified in subparagraph 3 of this section, if the emissions level
- 3 calculated according to subsection (5) of this section is equal to or greater than eighty
- 4 (80) percent of the PAL level; or
- 5 3. The cabinet may set the PAL at a level that is determined to be:
- a. More representative of the source's baseline actual emissions; or
- 5 b. Appropriate considering the following factors:
- 8 (i) Air quality needs;
- 9 (ii) Advances in control technology;
- 10 (iii) Anticipated economic growth in the area of the source;
- 11 (iv) The cabinet's goal of promoting voluntary emissions reductions; and
- (v) Other factors as specifically identified by the cabinet in its written rationale for
 setting the PAL level.
- 4. The cabinet shall not approve a renewed PAL level higher than the current PAL, unless the major stationary source has complied with the provisions of subsection
- 16 (10) of this section.
- (e) The PAL shall be adjusted <u>in conjunction with the [at the time of]</u> PAL permit
 renewal or Title V permit renewal, whichever comes first, if:
- 1. The compliance date for a state or federal applicable requirement that applies
 to the PAL source occurs during the PAL effective period; and
- 2. The cabinet has not already adjusted for the [such] requirement.
- (10) Increasing a PAL during the PAL effective period. The cabinet may increase
 a PAL emissions limitation during the PAL effective period if the major stationary source

- 1 complies with the provisions of this subsection.
- 2 (a) Application procedures. To request an increase in the PAL limit for a PAL
- 3 major modification, the owner or operator of the major stationary source shall submit a
- 4 complete application, which shall include:
- 5 1. Identification of the emissions units contributing to the increase in emissions
- 6 for the PAL major modification;
- 7 2. Demonstration that increased PAL, as calculated in paragraph (c) of this
- 8 subsection exceeds the PAL, and:
- 9 a. The level of control that results from BACT equivalent controls on each
- 10 significant or major emissions unit shall be determined by conducting a new BACT
- 11 analysis when [at the time] the application is submitted, unless the emissions unit is
- 12 currently required to comply with a BACT or LAER requirement that was established
- 13 within the preceding ten (10) years.
- b. If an emissions unit currently complies with BACT or LAER, the assumed
- 15 control level for that emissions unit shall be equal to the current level of BACT or LAER
- 16 for that emissions unit; and
- 17 3. A statement that the increased PAL level shall be effective on the day any
- 18 emissions unit that is part of the PAL major modification becomes operational and
- 19 begins to emit the PAL pollutant.
- 20 (b) NSR permit and compliance requirement. The owner or operator shall obtain
- 21 a major NSR permit for all emissions units contributing to the increase in emissions for
- 22 the PAL major modification.
- A significant level shall not apply in deciding for which emissions units a major

- 1 NSR permit shall be obtained; and
- Emissions units that obtain a major NSR permit shall comply with any
- 3 emissions requirements resulting from the major NSR process, even though the units
- 4 shall also become subject to the PAL or shall continue to be subject to the PAL.
- 5 (c) Calculation of increased PAL. The cabinet shall calculate the new PAL as the
- 6 sum of the allowable emissions for each modified or new emissions unit, plus the sum
- 7 of the baseline actual emissions of the significant and major emissions units assuming
- 8 application of BACT equivalent controls, plus the sum of the baseline actual emissions
- 9 of the small emissions units.
- (d) Public notice requirement. The public notice requirements of subsection (4) of
- 11 this section shall be followed during PAL permit revision for an increased PAL level.
- 12 (11) Monitoring requirements for PALs.
- 13 (a) General requirements.
- Each PAL permit shall contain enforceable requirements for the chosen
- 15 monitoring system that accurately determines plant-wide emissions of the PAL pollutant
- 16 in terms of mass per unit of time;
- 17 2. A monitoring system authorized for use in the PAL permit shall be:
- a. Approved by the cabinet pursuant to this subsection; [cabinet;] and
- b. Based on sound science and meet generally-acceptable scientific procedures
- 20 for data quality and manipulation;
- 3. The data generated by a monitoring system shall meet minimum legal
- 22 requirements for admissibility in a judicial proceeding to enforce the PAL permit;
- 4. The PAL monitoring system shall employ one (1) or more of the four (4)

- 1 general monitoring approaches meeting the minimum requirements set forth in
- 2 paragraph (b) of this subsection;
- 5. The cabinet may approve an alternative monitoring approach that meets the
- 4 requirements of subparagraphs 1 to 3 of this paragraph; and
- 5 6. Failure to use a monitoring system that meets the requirements of this section
- 6 shall render the PAL invalid.
- 7 (b) Minimum performance requirements for approved monitoring approaches. If
- 8 conducted in accordance with the minimum requirements in paragraphs (c) to (i) of this
- 9 subsection, the following shall be acceptable monitoring approaches:
- Mass balance calculations for activities using coatings or solvents;
- 11 2. CEMS;
- 12 3. CPMS or PEMS; and
- 4. Emissions factors.
- 14 (c) Mass balance calculations. An owner or operator using mass balance
- 15 calculations to monitor PAL pollutant emissions from activities using coatings or
- 16 solvents shall:
- 1. Provide a demonstrated means of validating the published content of the PAL
- 18 pollutant [that is] contained in or created by all materials used in or at the emissions
- 19 unit;
- 20 2. If it cannot be accounted for in the process, assume that the emissions unit
- 21 emits all of the PAL pollutant [that is] contained in or created by any raw material or fuel
- 22 used in or at the emissions unit; and
- 3. If the vendor of the material or fuel from which the pollutant originates

- 1 publishes a range, use the highest value of the published range of pollutant content to
- 2 calculate the PAL pollutant emissions, unless the cabinet determines there is site-
- 3 specific data or a site-specific monitoring program to support another pollutant content
- 4 within the range.
- 5 (d) CEMS. An owner or operator using CEMS to monitor PAL pollutant emissions
- 6 shall meet the following requirements:
- 7 1. CEMS shall comply with applicable Performance Specifications found in 40
- 8 C.F.R. Part 60, Appendix A; [Appendix B;] and
- 9 2. CEMS shall sample, analyze, and record data at least every fifteen (15)
- 10 minutes while the emissions unit is operating.
- 11 (e) CPMS or PEMS. An owner or operator using CPMS or PEMS to monitor PAL
- 12 pollutant emissions shall meet the following requirements:
- 1. The CPMS or the PEMS shall be based on current site-specific data
- 14 demonstrating a correlation between the monitored parameter and the PAL pollutant
- 15 emissions across the range of operation of the emissions unit; and
- 16 2. While the unit is operating, each CPMS or PEMS shall sample, analyze, and
- 17 record data at least every fifteen (15) minutes, or at another less frequent interval
- 18 approved by the cabinet.
- 19 (f) Emissions factors. An owner or operator using emissions factors to monitor
- 20 PAL pollutant emissions shall meet the following requirements:
- 21 1. All emissions factors shall be adjusted, if appropriate, to account for the
- 22 degree of uncertainty or limitations in the factors' development;
- 2. The emissions unit shall operate within the designated range of use for the

1 emissions factor, if applicable; and

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- 3. If technically practicable, the owner or operator of a significant emissions unit that relies on an emissions factor to calculate PAL pollutant emissions shall conduct validation testing to determine a site-specific emissions factor within six (6) months of
- 5 PAL permit issuance, unless the cabinet determines that testing is not required.
- (g) A source owner or operator shall record and report maximum potential emissions without considering enforceable emissions limitations or operational restrictions for an emissions unit during any period of time there is no monitoring data, unless another method for determining emissions during the [such] periods is specified in the PAL permit.
 - (h) If an owner or operator of an emissions unit cannot demonstrate a correlation between the monitored parameters and the PAL pollutant emissions rate at all operating points of the emissions unit, as an alternative to the requirements in paragraphs (c) to (g) of this subsection, <u>in conjunction with [at the time of]</u> permit issuance the cabinet shall:
 - 1. Establish default values for determining compliance with the PAL based on the highest potential emissions reasonably estimated at operating points if a correlation cannot be demonstrated; or
 - 2. If there is <u>not a [ne]</u> correlation between monitored parameters and the PAL pollutant emissions, determine that operation of the emissions unit during operating conditions is a violation of the PAL.
- (i) Revalidation. All data used to establish the PAL pollutant shall be revalidated
 through performance testing or other scientifically-valid means approved by the cabinet.

- 1 Validation testing shall occur at least once every five (5) years after issuance of the
- 2 PAL.

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- 3 (12) Recordkeeping requirements.
- 4 (a) The PAL permit shall require an owner or operator to retain a copy of all records necessary to determine compliance with any requirement of this section and of the PAL, including a determination of each emissions unit's twelve (12) month rolling total emissions for five (5) years from the date of the determination.
 - (b) The PAL permit shall require an owner or operator to retain a copy of the following records for the duration of the PAL effective period plus five (5) years:
- 1. A copy of the PAL permit application and any applications for revisions to thePAL; and
 - Each annual certification of compliance pursuant to Title V and the data used to certify the compliance.
 - (13) Reporting and notification requirements. The owner or operator shall submit semi-annual monitoring reports and prompt deviation reports to the cabinet in accordance with 401 KAR Chapter 52 that meet the following requirements:
 - (a) Semiannual report. The semiannual report shall be submitted to the cabinet within thirty (30) days of the end of each reporting period and shall contain:
 - 1. The identification of owner and operator and the permit number;
- 2. Total annual emissions, in tpy, based on a twelve (12) month rolling total for 21 each month in the reporting period recorded pursuant to subsection (12)(a) of this 22 section;
- 3. All data used in calculating the monthly and annual PAL pollutant emissions,

- 1 including any quality assurance or quality control data;
- 4. A list of any emissions units modified or added to the major stationary source
- 3 during the preceding six (6) month period;
- 4 5. The number, duration, and cause of any deviations or monitoring malfunctions,
- 5 other than the time associated with zero and span calibration checks, and any
- 6 corrective action following a deviation;
- 7 6. A notification of permanent or temporary shutdown of any monitoring system
- 8 including:
- 9 a. The reason for the shutdown;
- b. The anticipated date that the monitoring system shall be fully operational or
- 11 shall be replaced with another monitoring system;
- 12 c. If applicable, a statement that the emissions unit monitored by the monitoring
- 13 system continued to operate without the monitoring system; and
- d. The calculation of the emissions of the pollutant or the number determined
- according to subsection (11)(g) of this section that is included in the permit; and
- 7. A signed statement by the responsible official, as defined by 401 KAR 51:001,
- 17 <u>Section 1(210), [52:001,]</u> certifying the truth, accuracy, and completeness of the
- 18 information provided in the semiannual report.
- 19 (b) Deviation report. The major stationary source owner or operator shall submit
- 20 reports of any deviation or exceedance of the PAL requirements, including periods
- 21 monitoring is unavailable.
- 22 1. A report submitted pursuant to 40 C.F.R. 70.6(a)(3)(iii)(B) shall satisfy this
- 23 deviation reporting requirement;

- 2. The deviation report shall be submitted within the time limits prescribed by the
- 2 applicable program implementing 40 C.F.R. 70.6(a)(3)(iii)(B);
- 3 3. The deviation report shall contain the following information:
- a. The identification of the owner, the <u>operator</u>, and [operator and] the permit number;
- 6 b. The PAL requirement that experienced the deviation or that was exceeded;
- c. Emissions resulting from the deviation or the exceedance; and
- d. A signed statement by the responsible official, as defined by 401 KAR 51:001,

 Section 1(210), [52:001,] certifying the truth, accuracy, and completeness of the information provided in the report.
- 11 (c) Revalidation results. The owner or operator shall submit to the cabinet the 12 results of any revalidation test or method within three (3) months after completion of the 13 test or method.
- 14 (14) Transition requirements.

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- (a) After the U.S. EPA approves the Kentucky SIP revisions for the PAL
 provisions published at 67 Fed. Reg. 80186, December 31, 2002, the cabinet shall only
 issue a PAL that complies with the requirements of this section.
 - (b) The cabinet may supersede a PAL that was established before <u>August 10</u>, <u>2006</u>, [the date the U.S. EPA approves the Kentucky SIP revisions for the PAL provisions published at 67 Fed. Reg. 80186, December 31, 2002,] with a PAL that complies with the requirements of this <u>administrative regulation</u>. [section.]

9/9/09

Date

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Leonard K. Peters, Secretary Energy and Environment Cabinet PUBLIC HEARING AND PUBLIC COMMENT PERIOD: A public hearing on this administrative regulation shall be held on October 28, 2009, at 10:00 a.m. (local time) in Conference Room 201 B on the first floor of the Division for Air Quality at 200 Fair Oaks Lane, Frankfort, Kentucky. Individuals interested in being heard at this hearing shall notify this agency five (5) workdays prior to the hearing of their intent to attend. If no notification of intent to attend the hearing is received by that date, the hearing may be canceled.

This hearing is open to the public. Any person who wishes to be heard shall be given an opportunity to comment on the proposed administrative regulation. If you do not wish to be heard at the public hearing, you may submit written comments on the proposed administrative regulation. Written comments shall be accepted until close of business on November 2, 2009. Send written notification of intent to be heard at the public hearing or written comments on the proposed administrative regulation to the contact person listed below.

The hearing facility is accessible to persons with disabilities. Requests for reasonable accommodations, including auxiliary aids and services necessary to participate in the hearing, may be made to the contact person at least five (5) workdays prior to the hearing.

CONTACT PERSON: Laura Lund, Environmental Technologist II, Division for Air Quality, 1st Floor, 200 Fair Oaks Lane, Frankfort, Kentucky 40601, telephone (502) 564-3999, ext. 4428, fax (502) 564-4666, and electronic mail Laura_Lund@ky.gov.

REGULATORY IMPACT ANALYSIS AND TIERING STATEMENT

Administrative Regulation #: 401 KAR 51:052

Contact person: Laura Lund, Environmental Technologist ii

(1) Provide a brief summary of:

- (a) What this administrative regulation does: This administrative regulation provides for the nonattainment new source review (NSR) and applies to new construction or modification of major stationary sources in areas designated nonattainment for a specified pollutant.
- (b) The necessity of this administrative regulation: This administrative regulation is necessary in order to continue to receive full delegation of authority for the federal NSR program in Kentucky.
- (c) How this administrative regulation conforms to the content of the authorizing statutes: KRS 224.10-100 authorizes the Cabinet to promulgate administrative regulations for the prevention, abatement, and control of air pollution. KRS 224.10-100(26) mandates the preservation of clean air resources while ensuring economic growth. This regulation conforms to the statutes because it is no more stringent than the federal mandate.
- (d) How this administrative regulation currently assists or will assist in the effective administration of the statutes: This administrative regulation is no more stringent than the federal mandate, codified in 40 C.F.R. 51.165.
- (2) If this is an amendment to an existing administrative regulation, provide a brief summary of:
 - (a) How the amendment will change this existing administrative regulation: This amendment revises the list of exempted major stationary sources codified in 40 C.F.R. Part 51, and the list of major sources codified in 40 C.F.R. Part 70, as they relate to PSD, NSR, and Title V applicability. The amendment removes the existing standards and requirements for clean units (CU) and pollution control projects (PCP) that have been vacated at the federal level in a D.C. Court of Appeals decision. This amendment includes nitrogen oxides (NOx) as a precursor for ozone.
 - (b) The necessity of the amendment to this administrative regulation:
 These regulatory revisions are necessary in order to implement changes in the KY State Implementation Plan (SIP) in response to changes in the federal rules
 - How the amendment conforms to the content of the authorizing statutes: Kentucky's federally-approved NSR SIP provides the permitting and enforcement authority delegated from the U.S. EPA to the Commonwealth.

- (d) How the amendment will assist in the effective administration of statutes: This administrative regulation amendment is modeled after the federal regulations.
- (3) List the type and number of individuals, businesses, organizations, or state and local governments affected by this administrative regulation. The amendment revises the applicability of major sources by specifically excluding "chemical process plants" that produce ethanol through a natural fermentation process. In addition, sources meeting standards and requirements for CU and PCP, and sources emitting NOx in an area designated as nonattainment for ozone, are affected by this administrative regulation.
- (4) Provide an assessment of how the entities identified in question (3) will be impacted by either the implementation of this administrative regulation, if new, or by the change if it is an amendment:
 - (a) List the actions that each of the regulated entities identified in question (3) will have to take to comply with this administrative regulation or amendment: Regulated entities shall continue to comply with this administrative regulation. This amendment affects existing or proposed facilities that produce ethanol through a natural fermentation process as it specifically excludes them, under the component term "chemical process plants," from having to comply with the PSD/NSR requirements. Sources will no longer be required to meet standards and requirements for CU and PCP. In addition, sources emitting NOx in an area designated as nonattainment for ozone will be subject to permitting as volatile organic compounds have been.
 - (b) In complying with this administrative regulation or amendment, how much will it cost each of the entities identified in question (3): There are no additional costs involved in compliance with this regulation.
 - (c) As a result of compliance, what benefits will accrue to the entities identified in question (3): Ethanol facilities, as defined in C.F.R. 51.166 and this administrative regulation are no longer included under the 100 tons per year PTE limit for major source categories under the PSD/NSR rules. As a result of not having to apply additional emission controls, growth of the ethanol industry will increase.
- (5) Provide an estimate of how much it will cost the administrative body to implement this administrative regulation:
 - (a) Initially: The Cabinet will not incur any additional costs for the implementation of this regulation.
 - (b) On a continuing basis: There will not be any additional continuing costs for the implementation of this regulation.
- (6) What is the source of the funding to be used for the implementation and enforcement of this administrative regulation: The Cabinet's current operating budget will be used for the implementation and enforcement of this

regulation.

- (7) Provide an assessment of whether an increase in fees or funding will be necessary to implement this administrative regulation, if new, or by the change if it is an amendment. No increase in fees or funding is necessary to implement this regulation.
- (8) State whether or not this administrative regulation established any fees or directly or indirectly increased any fees. This regulation does not establish, nor does it directly or indirectly increase any fees.
- (9) **TIERING: is tiering applied?** Yes. The applicability and compliance requirements that are tiered in this administrative regulation are modeled after the federal PSD and NSR rules.

FEDERAL MANDATE ANALYSIS COMPARISON

- 1. Federal statute or regulation constituting the federal mandate. 42 U.S.C. 7401-7671q; 42 U.S.C. 7401-7626, 7407(d)(1)(A)(i), (ii), and (iii), 7410, provides the statutory mandate codified in 40 C.F.R. Part 52.21, as amended in 72 Fed. Reg. 24077, May 1, 2007, and in 72 Fed. Reg. 32528, June 13, 2007.
- 2. State compliance standards. The state compliance standards are found in KRS 224.10-100(5).
- 3. Minimum or uniform standards contained in the federal mandate. The federal NSR mandate requires sources described in Section 1 of this administrative regulation to demonstrate that any construction or modification of the source will not cause a net increase in pollution; neither will the source create a delay in attainment of the NAAQS; and that the source will install and use control technology that achieves the lowest achievable emissions rate (LAER).

The amendment to this administrative regulation excludes "chemical process plants" that produce ethanol by a natural fermentation process in the revised definition of major stationary source. Further revisions include the removal of clean unit (CU) and pollution control project (PCP) requirements because they have been vacated at the federal level by a decision from the D.C. Court of Appeals. This amendment requires sources emitting NOx in an area designated as nonattainment for ozone to be subject to permitting as volatile organic compounds have been.

- 4. Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements, than those required by the federal mandate? No. This regulation is modeled after federal regulations.
- Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements. Stricter standards and requirements are not imposed.

FISCAL NOTE ON STATE OR LOCAL GOVERNMENT

Administrative Regulation #: 401 KAR 51:052

Contact person: Laura Lund, Environmental Technologist !!

- 1. Does this administrative regulation relate to any program, service, or requirements of a state or local government (including cities, counties, fire departments, or school districts)? Yes.
- 2. What units, parts or divisions of state or local government (including cities, counties, fire departments, or school districts) will be impacted by this administrative regulation? The Division for Air Quality will continue to implement and enforce the New Source Review (NSR) program in the Commonwealth.
- 3. Identify each state or federal statute or federal regulation that requires or authorizes the action taken by the administrative regulation. KRS 224.10-100(5), 42 U.S.C. 7401-7671q.
- 4. Estimate the effect of this administrative regulation on the expenditures and revenues of a state or local government agency (including cities, counties, fire departments, or school districts) for the first full year the administrative regulation is to be in effect.
- (a) How much revenue will this administrative regulation generate for the state or local government (including cities, counties, fire departments, or school districts) for the first year? This regulation generates no revenues.
- (b) How much revenue will this administrative regulation generate for the state or local government (including cities, counties, fire departments, or school districts) for subsequent years? This regulation generates no revenues.
- (c) How much will it cost to administer this program for the first year? The Cabinet's existing operating budget continues as the source of funding for the implementation of this program.
- (d) How much will it cost to administer this program for subsequent years? There will be no additional costs for administering the program in subsequent years.

Note: If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.

Revenues (+/-): There is no known effect on current revenues.

Expenditures (+/-): There is no known effect on current expenditures.

Other Explanation: There is no further explanation.